




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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,193	08/10/2001	Thad E. Stamer	062004-1800	3820
24504	7590	09/21/2004	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			NEGRON, ISMAEL	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/927,193	Applicant(s) STARNER ET AL.	
	Examiner Ismael Negron	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____ |
|---|--|

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 12, 2004 has been entered.

Specification

2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification includes statements, which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

The light-emitting device 102 emits light on the object 101. The light can be, but is not limited to, infrared light such as near and far infrared light, laser light, white light, violet light, indigo light, blue light, green light, yellow light, orange light, red light, ultra violet light, microwaves, ultrasound waves, radio waves, X-rays, cosmic rays, or any other frequency that can be used to form the set of images 105 of the object 101. The

Art Unit: 2875

frequency of the light should be such that the light can be incident on the object 101 without harming the user 106.

Microwaves and radio waves are not considered to be part of the range of frequencies included by the term "light". Ultrasound waves are mechanical waves, not electromagnetic waves as is light. Cosmic rays are stream of ionizing radiation of extraterrestrial origin.

The light emitted by the disclosed portable/wearable light source cannot be construed as including microwaves, radio waves, ultrasound waves or cosmic rays.

Claim Objections

3. Claim 41 is objected to because of the following informalities: there is insufficient antecedent basis for the limitation "*a computer that comprises the processor*" in lines 1 and 2 of the claim. The cited lack of antecedent basis was not considered to make the claim indefinite, as it is clear that applicant's intention was to claim a computers as being part of the previously claimed processor, however, appropriate correction is required.

Claim Rejections - 35 USC § 112

First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2875

4. Claims 38 and 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to provide an explanation of how the claimed light source is capable of emitting light of an ultrasound waves, or cosmic rays nature, as claimed.

Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 33, 35, 38, 48, 50 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33 is indefinite as it is not clear if the applicant's intention was to claim an alternative limitation (e.g. Markush group), or an inclusive limitation necessarily including all (emphasis added) the recited elements of the claimed group of electrical devices. Claims 35, 48 and 50 are rejected for the same reasons as Claim 33.

Claim 38 is indefinite as it recited the light emitting device as emitting light characterized as microwave, ultrasound waves, radio waves and cosmic rays (see line 4), such characterization going against the accepted meaning of the term "light" (e.g.

Art Unit: 2875

electromagnetic radiation in the general range from infrared to ultraviolet) inside the art.

Claim 53 is rejected for the same reasons as Claim 38.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 32-42, 44-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over OH (U.S. Pat. 5,616,078) in view of GARRISS (U.S. Pat. 5,010,412).

OH discloses a system having:

- **a light emitting device (as recited in Claims 32 and 56),**
inherent;
- **the light emitting device illuminating an object (as recited in**
Claims 32 and 56), inherent;
- **an image forming device (as recited in Claims 32 and 56),**
Figure 1, reference number 31;
- **the image forming device forming one or more images due to**
light that is reflected from the object (as recited in Claims 32
and 56), column 4, lines 21-23;

Art Unit: 2875

- **a processor (as recited in Claims 32 and 56) , Figure 1,**
reference number 33;
- **the processor analyzing the motion of the object to control**
electrical devices (as recited in Claims 32 and 56), column 5,
lines 11-24;
- **a portable housing (as recited in Claims 32 and 56), inherent;**
- **the electrical device being one selected from the group**
consisting of a light, a car stereo system, a radio, a television,
a phone, a grill, a computer, a fan, a window, a stereo, a
refrigerator, an oven, a dishwasher, washers and dryers,
answering machines, phones, a garage door, a hot plate,
window blinds, night lights, door, safe combinations, electric
blankets, fax machines, printers, wheelchairs, adjustable beds,
intercoms, chair lifts, digital portraits, ATMs, faucets, freezers,
cellular phones, microscopes and electronic readers (as
recited in Claims 33 and 57), column 3, lines 64-66;
- **the processor processing data that corresponds to one or**
more images to monitor various conditions of a user (as
recited in Claims 34 and 58), column 4, lines 25-28;
- **the user being one of a machine, a human being, a robot, and**
an animal (as recited in Claims 35 and 59), Figure 1, reference
character Q;

Art Unit: 2875

- **the light emitting device being one of the group consisting of a plurality of light emitting diodes (LED), lasers, a tube light, and a plurality of bulbs (as recited in Claim 37), column 4, lines 50-55;**
- **the emitted light being one of the group consisting of infrared light, laser light, white light, violet light, indigo light, blue light, green light, yellow light, orange light, red light, UV light and X-rays (as recited in Claims 38 and 61), column 4, lines 50-55;**
- **the processor being configured to be portable (as recited in Claims 39 and 62), inherent;**
- **the object being one selected from the group consisting of a hand, a finger, a paw, a pen, a pencil, and a leg (as recited in Claim 40), as seen in Figure 1;**
- **the processor being coupled to the image forming device via a network (as recited in Claim 41), as seen in Figure 1;**
- **the user making different gestures to control the electrical devices (as recited in Claim 42), column 3, lines 14-17;**
- **a user pointing its body to the electrical device and making a gesture to control such electrical device (as recited in Claim 44), column 2, lines 12-17;**

Art Unit: 2875

- **a user moving to a location in which the electrical device is located and making a gesture to control such electrical device (as recited in Claim 45), column 2, lines 12-17; and**
- **a user pointing the light emitting device to one electrical device and making a gesture to control such electrical device (as recited in Claim 46), column 2, lines 12-17.**

OH discloses all the limitations of the claims except:

- a wearable housing (as recited in Claims 32 and 56);
- the housing including the light emitting device and the image forming device (as recited in Claims 32 and 56);
- the various conditions being monitored including tremors, Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, hypothermia and drinking habits (as recited in Claims 35 and 59); and
- the processor being included in the housing (as recited in Claims 36 and 60).

GARRISS (U.S. Pat. 5,010,412) disclose an illumination device having:

- **a light emitting device (as recited in Claims 32 and 56), Figure 1, reference number 10;**
- **the light emitting device illuminating an object (as recited in Claims 32 and 56), column 3, lines 4-9;**

Art Unit: 2875

- **an image forming device (as recited in Claims 32 and 56),**
Figure 1, reference number 24;
- **the image forming device forming one or more images due to light that is reflected from the object (as recited in Claims 32 and 56),** column 3, lines 4-9;
- **a processor (as recited in Claims 32 and 56),** column 3, lines 24-35;
- **the processor analyzing the motion of the object to control electrical devices (as recited in Claims 32 and 56),** column 3, lines 24-35;
- **a portable housing (as recited in Claims 32 and 56) ,** Figure 1, reference number 28
- **a wearable housing (as recited in Claims 32 and 56) ,** Figure 1, reference number 28;
- **the housing including the light emitting device and the image forming device (as recited in Claims 32 and 56),** as seen in Figure 1;
- **the processor being included in the housing (as recited in Claims 36 and 60),** column 3, lines 32-35;
- **the light emitting device being one of the group consisting of a plurality of light emitting diodes (LED), lasers, a tube light, and**

Art Unit: 2875

a plurality of bulbs (as recited in Claim 37), column 2, lines 63 and 64;

- **the emitted light being one of the group consisting of infrared light, laser light, white light, violet light, indigo light, blue light, green light, yellow light, orange light, red light, UV light and X-rays (as recited in Claims 38 and 61), column 2, lines 26-29;**

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the device of GARRISS in the system of OH to be able to illuminate the object without the need for an external light source, and to provide the image forming device with a uniformly illuminated object, as per the teachings of GARRISS.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the apparatus of OH and GARRISS to monitor conditions such as including tremors, Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, hypothermia and drinking habits, and wherein the user is one of a machine, a human being, a robot, and an animal, to be able to provide indication of a health condition to medical personnel. In addition, it is noted that the apparatus of OH, disclosing all the structural limitations of the claimed invention and is therefore considered to meet the functional limitations. See MPEP § 2112.01.

In addition, the Examiner takes Official Notice of applicant's disclosure of Toshiba's Motion Processor (<http://toshiba.com/news/980715.htm>), which appears to be

Art Unit: 2875

capable of performing all the functions of the claimed invention (see page 2, lines 19-24 of the specification as filed).

7. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over OH (U.S. Pat. 5,616,078) in view of GARRISS (U.S. Pat. 5,010,412) as applied to claim 32 above, further in view of BAREIS (U.S. Pat. 5,706,399).

The teachings of OH and GARRISS disclose individually, or suggest in combination, all the limitations of the claimed invention, except a user speaking the name of an electrical device making a gesture to control such electrical device (as recited in Claim 43).

BAREIS discloses a speech-controlled system (Figure 3) capable of activating a variety of functions of an electrical device, such functions being activated by the user's speech (column 1, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include the speech-controlled system of BAREIS in the system of OH and GARRISS, to provide such system with the capability of being controlled by a user's speech, as per the teachings of BAREIS.

In addition, the Examiner's take Official Notice of applicant's statements regarding the old and well known in the art status of such speech-controlled systems (see page 3, lines 1-5 of the specification as filed).

Relevant Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fraden (U.S. Pat. 4,450,351), **Chen** (U.S. Pat. 4,768,020) and **Chen** (U.S. Pat. 5,258,899) disclose motion detectors.

Krueger et al. (U.S. Pat. 4,483,568), **Neely et al.** (U.S. Pat. 5,148,477), **Gerrissen et al.** (U.S. Pat. 5,319,747), **Korth** (U.S. Pat. 5,767,842), **Hoffberg et al.** (U.S. Pat. 5,901,246), **Kazama et al.** (U.S. Pat. 6,111,580) and **Hsieh** (U.S. Pat. 6,154,558) disclose various types of motion and gesture perception analyzers, for controlling electrical devices.

Weinstein (U.S. Pat. RE 31, 253), **Gokcen et al.** (U.S. Pat. 5,125,024), **Schalk et al.** (U.S. Pat. 5,475,791) and **Doi et al.** (U.S. Pat. 6,456,728) disclose a plurality of devices for providing control of electrical devices by means of voice commands.

Hough (U.S. Pat. 3,069,654), **Katana et al.** (U.S. Pat. 4,743,773), **Casasent** (U.S. Pat. 4,906,099) and **Lee et al.** (U.S. Pat. 6,160,899) disclose systems featuring image capture and recognition means for controlling electrical devices.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-

Art Unit: 2875

2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (571) 272-2378. The facsimile machine number for the Art Group is (703) 872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.



**JOHN ANTHONY WARD
PRIMARY EXAMINER**


lnr

September 16, 2004